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ABSTRACT

The relationship of the variable of social class to moderate and severe retardation was examined with 148 moderately and severely retarded students (4-12 years old) enrolled in special classes within the public school system. The effects of race and sex were also considered. A. Hollingshead's Two Factor Index of Social Position was used to determine the socioeconomic class. A significant increase in moderate and severe retardation was found in the lower socioeconomic groups; the incidence of males was not significantly higher, but there was a significant increase in occurrence in an ethnic group. Results of the study did not support the position taken by many authorities that the incidence of moderate and severe retardation is stable across socioeconomic groups. (Author/CL)

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Incidence of Moderate and Severe Retardation

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Paper presented at the Annual Conference of the Mid-South Educational Research Association (13th, New Orleans, LA, November 14-16, 1984)

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Abstract

The relationship of the variable of social class to moderate and severe retardation was examined. The effects of race and sex were also considered. Hollingshead's "Two Factor Index of Social Position" (1975) was used to determine the socioeconomic class. A significant increase in moderate and severe retardation was found in the lower socioeconomic groups; the incidence of males was not significantly higher, but there was a significant increase in occurrence in an ethnic group.

Incidence of Moderate and Severe Retardation

Mental retardation is considered to be affected by environmental factors such as social class, age, race, and geographic area. The relationship between children's IQ and the status of their families has been demonstrated (Robinson and Robinson, 1976). Mild mental retardation is generally conceded to occur within the lower socioeconomic group. However, below the IQ level of 55 the retarded are believed to be distributed equally among all segments of the population (Ingalls, 1978; Kirk, 1974; Litton, 1975). Kirk (1972) reported that "the prevalence of totally dependent or trainable (moderate and severe) children does not differ between the low, middle and high socioeconomic communities." (p. 185). He maintains that social class is not an important variable in the "trainable" retarded population and believes that pathological conditions occur with the same frequency regardless of the cultural level of the family. Prevalence rates are reported as about 4 in 1,000 in most basic introductory texts in special education. (c.f. Haring, 1982). Abramowiz and Richardson (1975) contend that the occurrence of moderate to profound retardation tends to be random rather than associated with any particular environmental variables, although in referring to studies by Drillien in England who found that the families of severely retarded children includes a slight overrepresentation of the lower socioeconomic classes Abramowiz

did speculate that surveys in large urban areas might find more severe retardation among the poor. However, he recommended studies in other communities to determine if those findings would be confirmed.

There is also a great deal of evidence concerning the effects of the variables of race and sex on mental retardation. Most studies reporting these effects have considered mental retardation in the generic sense, encompassing all levels of retardation. Robinson and Robinson (1976) reviewed various positions held by others regarding the factor of race. The summary of the evidence was the children from several ethnic minority groups on the average perform less well on tests of intelligence than do white children; however, the scores overlap. When the variable of sex is considered, studies report a higher incidence of retardation in males than in females. (Farber, 1968; Ingalls, 1978; McMillan, 1977).

It was the purpose of this study to determine the relationship of the variable of social class to a moderately and severely retarded population in a special school in the public school system. This study also examined the variables of race and sex within this population.

Method

Subjects

The subjects were 148 moderately and severely mentally retarded students enrolled in special classes within the public school system. There are no classes for moderately and severely retarded children in the private school system in this area. The school system enrolls 43,849 school-age children (K-6) in an area of a total population of 285,167. These 148 students, ranging in age from 4 years to 12, had been classified as moderately and severely retarded children by an interdisciplinary team consisting of a psychologist, speech and hearing specialist, educational consultant and social worker. Their intelligence quotients, as measured by the Wechsler Intelligence Scale for Children or the Stanford-Binet ranged from 25 to 50 Full Scale Intelligence Quotient.

Instrument

Hollingshead's "Two Factor Index of Social Position" (1957) was used to determine the socioeconomic class of the students. This scale utilizes two factors, occupation and education to determine the social position an individual occupies in the status structure of society. Weights for each factor are used to calculate the Index of Social Position (1957). The Index of Social Position may be divided into groups of scores for the purpose of predicting the social class position of a family.

Procedure

The cumulative folders of the 148 students were reviewed and students were classified by race and sex. Data regarding education and occupation of the subjects' parent were collected and the social class position of the family was computed. Data were tabulated by social class, race and sex.

Chi square analysis was used to determined if the population was distributed normally across socioeconomic-economic groups. The Kruskal-Wallis One Way Analysis of Variance was employed to determine the effect of race and sex on the distribution of the population.

Results

Table I portrays the distribution frequency of the five socioeconomic groups, I-V, with I representing the highest

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Insert Table 1 about here

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socioeconomic scale on the continuum. There was a higher incidence of moderately and severely retarded children in the lower socioeconomic groups (IV, V). A chi-square with 4df was calculated on the data yielding a value of 58,2, p. < .001. This distribution was a significant departure from the expected ratio.

The frequency by race, sex, and pathological conditions is shown in Table 2. The Kruskal-Wallis One Way Analysis of

Insert Table 2 about here

Variance revealed no significant difference for the variable of sex, $H' = 0.00$; however, the variable of race was significant, $H' = 49.79$, $p. < .05$.

Discussion

A higher incidence of moderately and severely retarded children in the lower socioeconomic group of this population occurred. A significant difference existed between the low, middle and high groups. Social class appeared to be an important variable with a significant increase in pathological conditions occurring in the lower socioeconomic groups. This would appear to be a logical outcome as low SES group women have less access to prenatal care and are more vulnerable to infections, malnutrition and other conditions associated with mental retardation of the pathologic type.

In this study of moderately and severely retarded individuals the incidence of males was not found to be significantly higher; although there was a higher incidence of moderate to severe retardation in an ethnic group. This may be attributed to the disproportionate representation of the ethnic group in the lower SES groups across society at large.

Although these specific findings cannot be generalized to the total population at large, the results of this study did not support the posture taken by many authorities (Kirk, 1972; Ingalls, 1978) who refer to no specific data to support their position. Additional research is necessary to explore the relationship of environmental factors, e.g. social class, race and sex in the moderately and severely retarded population.

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Table 1

Occurrence of Moderate and Severe Retardation by Race, Sex, and Social Class

	Black		White		Total
Social Class	Male	Female	Male	Female	
I	2		6	3	11
II			5	1	6
III	1	1	21	10	33
IV	6	6	12	19	43
V	27	16	5	5	53

Table 2

Occurrence of Moderate and Severe Retardation by Race, Sex, and Social Class by Downs Syndrome and Other Pathology

	Downs Syndrome				Other Pathology			
	Black		White		Black		White	
Social Class	Male	Female	Male	Female	Male	Female	Male	Female
I	1	1	2	1			4	2
II			1				4	1
III			7	4	1	1	15	5
IV		1	3	5	6	5	9	14
V	4	1	2		23	15	3	5